

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

Textile Terminologies from the Orient to the
Mediterranean and Europe, 1000 BC to 1000 AD

Centre for Textile Research

2017

Armenian Textile Terminology

Birgit Anette Olsen
University of Copenhagen

Follow this and additional works at: <http://digitalcommons.unl.edu/texterm>



Part of the [Ancient History, Greek and Roman through Late Antiquity Commons](#), [Art and Materials Conservation Commons](#), [Classical Archaeology and Art History Commons](#), [Classical Literature and Philology Commons](#), [Fiber, Textile, and Weaving Arts Commons](#), [Indo-European Linguistics and Philology Commons](#), [Jewish Studies Commons](#), [Museum Studies Commons](#), [Near Eastern Languages and Societies Commons](#), and the [Other History of Art, Architecture, and Archaeology Commons](#)

Olsen, Birgit Anette, "Armenian Textile Terminology" (2017). *Textile Terminologies from the Orient to the Mediterranean and Europe, 1000 BC to 1000 AD*. 15.

<http://digitalcommons.unl.edu/texterm/15>

This Article is brought to you for free and open access by the Centre for Textile Research at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Textile Terminologies from the Orient to the Mediterranean and Europe, 1000 BC to 1000 AD by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

Armenian Textile Terminology

Birgit Anette Olsen, University of Copenhagen

In *Textile Terminologies from the Orient to the Mediterranean and Europe, 1000 BC to 1000 AD*,
ed. Salvatore Gaspa, Cécile Michel, & Marie-Louise
Nosch (Lincoln, NE: Zea Books, 2017), pp. 188-201.

doi:10.13014/K2BK19HV

Copyright © 2017 Salvatore Gaspa, Cécile Michel, &
Marie-Louise Nosch.

Photographs copyright as noted.



Armenian Textile Terminology

Birgit Anette Olsen

The part of the Armenian vocabulary that is inherited from the Indo-European protolanguage is notoriously limited, variously estimated to include between 450 and 700 stems. Otherwise, the lexicon is dominated by etymologically obscure elements and an impressive amount of Middle Iranian loanwords, reflecting the centuries of Iranian political dominance. In particular the Parthian loans, introduced during the Arsacid dynasty (247 BC–224 AD), have left their mark on the Classical Armenian language, attested from the early 5th century, to a similar extent as Old French on English or Low German on Danish, so that linguists until the late 19th century still considered Armenian an aberrant Iranian dialect rather than an independent branch of the Indo-European family. The other main sources of loanwords, Syriac and Greek, are intimately connected with the introduction of Christianity around 300 and hence mainly restricted to the specific word fields of religion and philosophy.¹

Obviously, this state of affairs also affects the textile vocabulary where the impact of Iranian language and culture can hardly be overestimated.² Thus, it is

quite natural that the Iranian superstrate dominates the lexicon pertaining to advanced textile production, clothing, fashion and ornaments, while on the other hand the core of inherited terms refers to basic products and techniques such as fleece and wool, spinning and weaving. The basis of the present lexical study is the classical language, mainly as attested in the oldest text, the Bible translation from around 410.³

The terminology of wool

Any discussion of Indo-European culture in general and the dating and geographical position of the Indo-European homeland in particular must include a reflection on the word for ‘wool’, since the occurrence of wool sheep and the technology of wool production is a significant cultural feature of all the ancient Indo-European civilizations. There can be no doubt that the protolanguage had a feminine noun with the precise meaning wool in the daughter languages and a protoform **h₂ulh₁-nah₂* which is continued in most branches of the family: Vedic *úrṇā-*, Avestan *varəṇā-*, Latin *lāna*, Welsh *gwlan*, Gothic *wulla*, Lithuanian

1. According to Solta (1990, 13), 5572 of the words included in Ačaryan’s etymological dictionary (1928–35) are registered as being of unknown origin, 4014 are loanwords, mainly Iranian, and only 713 are considered inherited.

2. Cf. e.g. Hübschmann 1897, 91–259; Bolognesi 1960; Schmitt 1983; Olsen 1999, 857–920.

3. The treatment by Olsen 1999 includes details concerning the inventory and historical analysis of nouns and adjectives.

vilna, Old Church Slavic *vl̋na*. Other cognates are the Greek neuter *s*-stem *λῆνος* for expected feminine **lēné* where the aberrant gender and inflectional type may have been triggered by the two other words for ‘wool’, *εἶρος* and *πόκος*, and Hittite *hulana-*, also ‘wool’, whose exact protoform, **h₂ul̥a₁-nah₂* or **h₂ulh₁-ṇnah₂* may be debated. Irrespective of the details, the very existence of this stem in Hittite at least takes us back to the period before Anatolian, as the first branch, separated from the rest of the Indo-European family. However, one thing is the existence of a common word; another is its precise original meaning and derivational background.

As summed up by Anthony (2007, 59):

“Sheep with long woolly coats are genetic mutants bred for just that trait. If Proto-Indo-European contained words referring unequivocally to woven wool textiles, then those words have to have entered Proto-Indo-European after the date when wool sheep were developed. But if we are to use the wool vocabulary as a dating tool, we need to know both the exact meaning of the reconstructed roots and the date when wool sheep first appeared. As the dating of this mutation is perhaps around 4000-3500 BC., one would then assume that the separation of the Indo-European family took place as late as the 4th millennium”.

This is a fair assumption, but taking on the role of the Devil’s Advocate, one could object that even if every single Indo-European language had a concordant word for ‘wool’, the meaning in the proto-language need not necessarily be ‘wool’ in our sense. Instead, it might e.g. have denoted the rough annual shedding of early domesticated sheep which could not be spun, but only used for the production of felt. In that case the semantic development to ‘wool’ would have taken place at a later stage, independently in the separate branches.

A scenario of this sort is not very likely, but we need exact linguistic evidence to definitely refute the faint possibility. If it can be proved that the meaning of the basic root of the word for ‘wool’, i.e. **h₂uelh₁-*, was ‘pluck, tear out’, the semantics of **h₂ulh₁-nah₂* > Latin *lāna* etc. ‘what is plucked (off)’ only makes sense in connection with the fleece of wool sheep. Incidentally this does seem to be the case, as substantiated by Latin *vellō* ‘to pluck (hairs, feathers etc.)’ and *vellus* ‘fleece’.⁴ Thus, we can be fairly confident that our Indo-European ancestors, perhaps five or six thousand years ago, did in fact possess domesticated wool sheep, initially plucking rather than shearing their wool to use it for spinning and weaving.

The exact match of *lāna* etc. happens to be unattested in Armenian. What we do have, however, is a precious isolated archaism in the form of the primary *men*-stem *gelmn* ‘fleece’ (Olsen 1999, 504; Martirosyan 2010, 204) from which **h₂ulh₁-nāh₂* constitutes a secondary derivative: where **h₂uel̥a₁-m̥* > *gelmn* is the fleece, **h₂ulh₁-mnāh₂* > **h₂ulh₁-nāh₂* (> *lāna* etc.) is a substantivized feminine/collective ‘that which pertains to the fleece’, i.e. ‘wool’.

In the meaning of ‘wool’ we find another inherited term, *asr*, cf. e.g. Psalms 147.16: *dnē z-jiwn orpēs z-asr* ‘he giveth snow like wool’, or Rev. 1.14: *ew glux nora ew herke ibrew z-asr spitak ew orpēs z-jiwn* ‘and his head and hair was white like wool and like snow’. Traditionally, *asr* is considered a contamination between **pokos* as in Greek *πόκος* ‘fleece’, Old Norse *fær* ‘sheep’ on the one hand, and the neuter *u*-stem **péku* > Vedic *pásu*, Avestan *pasu*, Latin *pecū*, Gothic *faihu* ‘livestock, cattle’ and Modern English *fee* on the other.⁵ While the meaning ‘fleece’ matches that of *πόκος* (but not that of *fær*!), the *u*-stem inflection⁶ is more in accordance with Vedic *pásu* etc.⁷

The root of at least *πόκος* and its cognates has been identified with that of Greek *πέκω* ‘(pluck >) comb, card’,⁸ Lith. *pešù* ‘pluck’, so that *πόκος*, rarely also neut. *s*-stem *πέκος* with regular *e*-grade, would be ‘plucking’ or ‘that which is plucked’, i.e. ‘sheep’s

4. For further discussion of the linguistic details, in particular the reconstruction of the basic root, cf. Olsen forthcoming.

5. Cf. also the sumerogram UDU-*uš* ‘sheep’ in Hittite, where the phonetic complement indicates a *u*-stem.

6. Only attested in the later language, but secured by the adjectives *asui* and *asueay* ‘woollen’.

7. Cf. Olsen 1999, 202 and Martirosyan 2010, 122-124 with references for a discussion of the phonological details (especially the origin of the initial *a*-).

wool, fleece', and we would have exactly the same semantic development as in $*h_2ulh_1-nah_2$ 'wool' from $*h_2uelh_1$ 'pluck'. An etymological identity between the roots of $πέκω$, $pešù$ 'pluck' and $*péku$ 'livestock', on the other hand, is not quite certain. While it is traditionally assumed that $*péku$ would have had a hypothetical basic meaning '(wool) sheep' or 'small cattle' with a secondary extension to 'livestock' in general, this development cannot be philologically verified, so that the connection is sometimes questioned, cf. e.g. Mallory & Adams (1997, 23). Still, the formal similarity and the apparent mutual semantic influence between $*péku$ and ($*peke/o- \Rightarrow$) $*pékos/pokos$ would seem to suggest an old connection, thus in particular the *u*-inflection of *asr* 'wool' and the perfect formal identity between the Greek *s*-stem $πέκος$ 'fleece' and Latin *pecus*, *-oris* 'cattle, small cattle'.

Another derivative of the root $*pek-$ possibly survives in the otherwise etymologically unclear *ostayn* (*i*-st.) 'web, textile' with the compound *sardiostayn* 'cobweb' (cf. *sard* 'spider'). At least a protoform $*pok-ti-$, already posited for Old Swedish *fæt*, Old English *feht* 'fleece', Old Frisian *fecht* 'wool, fleece', would probably yield Armenian *ost-* by regular sound change.⁹ As for the end segment *-ayn*, one may tentatively suggest a compound $*pokti-tñti$ or the like,¹⁰ derived from the root $*ten-$ 'stretch; spin', cf. e.g. Vedic *tanti-* 'cord, line, string', *tántu-* 'thread, cord, string, line, wire, warp (of a web)', *tántra-* 'warp', Persian *tan-* 'spin, twist', so that the

original meaning would have been something like 'wool-web'.

Another potentially inherited term is the *o*-stem *burd* 'wool' with the denominative verb *brdem* 'shear, cut (wool)', which does not have a generally accepted etymology. However, in his monumental, but not so easily accessible dictionary, Ačaryan,¹¹ with reference to Patrubány,¹² mentions a possible connection with Sanskrit *bardhaka-* 'cutting' and Latin *forfex* 'tongs, pincers; shears, scissors'. Semantically the suggestion is quite attractive. Like Latin *lāna* etc. on the one hand, Armenian *asr* and Greek $πόκος$ on the other, we must assume that the verbal root $*b^herd^h-$ 'gather, harvest' \rightarrow 'pluck (wool)' derives from a time when wool was plucked rather than shorn, and that the derivatives only later, in the individual branches and following the technological development, were lexicalized with the specific meaning of 'shearing'.¹³ The root vocalism of *burd* which would at first sight appear to point to a lengthened *o*-grade $*b^hōrd^h-$, is somewhat surprising; on the other hand, we have two apparent parallels in *durn* 'potter's wheel'¹⁴ and *burn* 'tower'.¹⁵ The word *burd* is quite rare in classical literature beside the more usual *asr*.¹⁶ Another word for 'fleece (of wool)' is the Semitic loan *gzat*, Syriac *gezzāthā*, which is only attested four times in the same passage of the Book of Judges, 6.37-40, as a translation of Greek $πόκος$.

While Armenian may thus have preserved as many as three inherited words for 'fleece' and

8. Also, with secondary semantic transfer, 'shear', e.g. Theocr.28.13: $πόκοις πέζασθαι$ 'have their wool shorn'.

9. Cf. *dustr* 'daughter' < $*d^hug_2tér$ with loss of the laryngeal $*\partial_2$, regular palatalization $*g > *ḡ$ after *u* and voicing assimilation $*ḡt > *kt > st$. The numeral *ut* 'eight' most likely goes back to $*optō$ as a substitution for $*oktō$ after $*septm$ ($> ew^n$) 'seven' (cf. Martirosyan 2010, 631).

10. Regular loss of $*-i-$ in unaccented syllable, $*-nt- > -an-$ and *i*-epenthesis $*-ani- > -ayn$.

11. Ačaryan, 1971: 488-489.

12. Patrubány, 1902: 59.

13. Cf. Flemestad & Olsen, this volume, for further details and references.

14. Root $*d^herḡ^h-$ 'turn'.

15. Root $*b^herḡ^h-$ '(be) high'. A lengthened *o*-grade is rather a morphological monstrosity except in *vṛddhi* formations, and apart from this peculiarity, the root-final *-g-* of both *burn* and *durn* is at variance with the regular development of the palatal $*-ḡ^h- > -j-$ in the clearly inherited *barjr* 'high' < $*b^hḡ^hu-$ and aor. *darjay* 'turned' < $*d^hḡ^h-$ from the very same roots. On this background it seems possible, as suggested in Olsen 1999, 951, that we are dealing with loans from another Indo-European language with different sound laws where *-ur-* might represent either a zero grade $*-r-$ or an *o*-grade $*-or-$. Now *burd* might be added to the evidence, and at least it is noteworthy that from a semantic point of view *burn*, *durn* and *burd* are all likely candidates for cultural loans/*Wanderwörter*.

16. Cf., however, Hebr. 9.19: *brdov karmrov*, Greek $ἐρίον κόκκινον$, 'scarlet wool' and the adjective *brdeay* 'woollen' (Lazar P'arpec'i, 5th century).

‘wool’, *gelmn*, *asr* and perhaps *burd*, the origin of the common term for ‘flax, linen’, *ktaw* (o-st.), is unknown, and its rare synonym *xcuc* in Judg. 15.14 seems to have a Caucasian source.¹⁷ The *Wanderwort behez/behēz* ‘fine linen’,¹⁸ as also Greek βύσσος which is transmitted through Semitic, ultimately goes back to Egyptian,¹⁹ but the immediate source is unknown;²⁰ another pedigree of the same stem is *vuš* ‘fibre of flax’.²¹ *Xorg* (o-st.) ‘sackcloth’ is either transmitted through Syriac *xurgā* or borrowed directly from Middle Iranian **xwarg*-. Finally, *stew* ‘camel’s hair’ is traditionally compared with Vedic *stūkā*- ‘knot or tuft of hair or wool’ and *stupā*- ‘knot, tuft of hair’ though the exact protoform is open for discussion.²²

Terminology of spinning and weaving

Most of the verbs pertaining to basic textile technology of spinning and weaving are more or less direct continuations of inherited stems though the lexicalized meaning has sometimes undergone changes in the course of time. While the common Indo-European root for ‘weave’, **uebh*-, known from e.g. Greek ὑφαίνω and German *weben*,²³ has left no apparent traces, the usual Armenian verb is *ankanem*. Synchronically this looks like the active counterpart of *ankanim*, aor. *ankaw*, ‘fall down, come down, hang down’ from the root **seng*^w- as in Gothic *sigquan* ‘sink, go down’, English *sink*, and the causative *sagqjan* ‘lower, let down’ which would also be the expected meaning of *ankanem*. If we are indeed dealing

with the same root from a historical point of view, the peculiar semantic development may perhaps be seen in connection with weaving on vertical looms where the warp is held down by the loom-weights, cf. also *ankuac* ‘weaving, texture’ with the literal meaning ‘what has been made fall, go down’.²⁴ A compound with the same stem is found in the designation of the ‘weaver’, *ostaynank*, lit. ‘who makes the web come down’, i.e. ‘web-weaver’, cf. e.g. 1.Chron.11.23: *nizak ibrew z-stori ostaynankac* “a spear like a weaver’s beam”, whence also the derivative *ostaynankut*ʿ*iwn* ‘weaver’s work’.

A root from the terminology of spinning is Indo-European *(*s*)*penh*₁-,²⁵ with or without the “mobile *s*-” in Gothic *spinnan* ‘spin’, Lithuanian *pinù* ‘plait’, Old Church Slavic *пънѣ* ‘stretch’ and, with secondary metaphorical meaning, Greek πένομαι and πονέομαι ‘exert oneself, make an effort’. An Armenian continuation of this verb is allegedly found in *henum* ‘weave, sew together’ with the variant *hanum* where the vocalism is assumed to be analogically extended from the original aorist stem.²⁶ However, it is remarkable that *henum* and *hanum* hardly occur in classical literature, losing ground to *niwt^cem* in the basic meaning of ‘spinning’ from the earliest records, but still sporadically attested in later sources.²⁷

The commonly used verb for ‘spin’ is the denominative *niwt^cem*, derived from the generic term *niwt^c* ‘stuff, material’ which is mainly used about textiles, e.g. Ex.39.27: *i niwt^coy behezoj* “of linen material”. Beside its literal meaning ‘spin’, e.g. Matth.6.28 = Luke 12.27: *oč^c janay ew oč^c niwt^cē* “they toil not,

17. Ačaryan II, 375.

18. O-st.; -h- apparently hiatus breaker.

19. Cf. Spiegelberg 1907, 128-29.

20. Ačaryan I, 437-438.

21. Ačaryan IV, 348.

22. IEW 1055; Mallory & Adams 1997, 139; Ĵahukyan 1987, 195; Olsen 1999, 425.

23. LIV 658.

24. The imaginary may also work with cobwebs where the spider falls down with the first thread of the web, cf. e.g. Is. 59.5: *z-ostayn sardic^c ankanen*, Greek ἰστὸν ἀράχνης ὑφαίνουσιν, “they weave the spider’s web”.

25. LIV 578-579.

26. Klingenschmitt 1982, 235.

27. In their reverse dictionary of Classical Armenian, covering all of the most important early sources, Jungmann and Weitenberg (1993) do not register a single occurrence of *henum* or *hanum*, and just one attestation of the variant *hinum* from the comparatively late writer Movsēs Xorenac*ʿ*i (9th century).

neither do they spin”, the verb *niwt^{em}* is frequently used metaphorically in the sense of ‘spinning a yarn, telling a tall story, scheming’, cf. e.g. Ps.49.19: *Be-
ran k^o yačaxer z-č^o arut^{iwn}, ew lezu k^o niwt^{er}
nengut^{iwn}* “Thou givest thy mouth to evil, and thy
tongue *frameth deceit*”, or Prov.3.29: *Mi niwt^{er}
barekami k^{um} č^{eris}* “Devise not *evil* against thy
neighbour”. If the basic root is **sneh₁(i)-* ‘spin’,²⁸ as
continued in e.g. Latin *neō*, Greek *νή* ‘spins’, Old
Irish *níid* ‘twists, binds’ and Old High German *nāen*
‘sow’, the underlying noun may be analysed as ei-
ther a *tu*-stem **sneh₁-tu-*²⁹ as opposed to the **-ti-*
stem of Greek *νήσις* ‘spinning’, Old High German
nāt ‘seam’ or a “proterodynamic” **-ti*-stem **sneh₁-
tōi-*, in both cases with *u*-epenthesis and analogical
o-stem inflection.

Another verb which is usually treated in the same
context is *teke^{em}*, traditionally translated ‘twist’ or
the like in historical-comparative literature³⁰ and in-
terpreted as a primary thematic verb from **tek-* ‘twist,
weave’,³¹ otherwise attested with an apparent *s*-exten-
sion, e.g. Latin *texō* ‘weave, plait’. However, as regis-
tered in the normative dictionaries and affirmed by the
textual evidence,³² the original meaning of the Arme-
nian verb is not ‘twist’, but rather ‘forge’, in particular
‘whet’, metaphorically also ‘educate’, and even the
later meaning ‘incline, tilt, bow, bend’ is quite gen-
eral and not specifically used in contexts where tex-
tiles are involved. This is primarily a technical term

used about the smith rather than the textile worker.³³

We now have to consider the meaning of the root(s)
**tek-* and/or **teḱ-* and its/their potential relation to
textile terminology, including the extended or redup-
licated forms “**teks-/teḱs-*” and “**te-tḱ-*” > “*teḱp-*”.
Pokorny³⁴ registers the homonymous roots **tek-* “zeu-
gen, gebären” and **tek-* “weben, flechten”, while
LIV³⁵ reconstructs the former with a root-final velar
**tek-*, the latter with a palatal **teḱ-*. Now, if the Ar-
menian verb *teke^{em}* is excluded for semantic reasons,
there is no specific reason to reconstruct a velar rather
than a palatal.³⁶ Thus it is sufficient to posit a single
root **teḱ-* ‘make, produce’, perhaps continued in its
simple form in Greek *τέκνον* ‘child’ with the redupli-
cated present *τίκτω* ‘beget, produce’.³⁷ An apparent
s-extension is found in Hittite *takkešzi*, 3.pl. *takšanzi*
‘fit together, unite’,³⁸ Latin *texō* ‘weave, plait; join,
fix together, build’ and Middle High German *dehsen*
‘break flax’, and finally an old reduplicated stem **te-
tḱ-* > **teḱp-* is traditionally seen in Vedic *tāṣṭi* ‘builds,
fashions, makes’, Avestan *tāšt* ‘made’, Old Church
Slavic *tesati*, Lithuanian *tašyti* ‘hew’. This stem also
appears to be the base of the noun continued in Vedic
tákṣan-, Greek *τέκτων* ‘carpenter’ (Mycenaean *te-ko-
no*) and Avestan *tašan-* ‘creator’, famously featur-
ing in the poetic language of Indo-Iranian and Greek
where ‘carpenter of words’ is used as a kenning for
the poet.³⁹ However, the precise formal distinction
between **teks-* and **teḱ-* is somewhat unclear, and

28. LIV 571-572.

29. Klingenschmitt 1982, 180.

30. Solta 1960, 378: “drehen, flechten, erzeugen”; IEW 1068: “drehe, flechte, wickle”, repeated in LIV 619.

31. LIV 1.c.

32. E.g. 1.Sam.13.20; Is.44.12.

33. Ačařyan II, 178: *kṛanelov kokel, šinel, srel* “by hammering to smoothe, fashion, whet”; Nor bařgirk^e I, 810: “*Χαλκεύω*, Fabrico, tundo, cudo. *θήγω*, acuo, ew [and] *παιδεύω*, erudio”. Ciakciak (I, 578) agrees on the primary meanings ‘aguzzarie, affilare, arro-
tare, appuntare’, ‘esercitare, istruire, informare’, including the metaphorical use of *teke^{em}* ‘Rinforzar le parole; rin vigorire il
discorso’, and finally adding ‘piegare, torcere, flettere’ [fold, twist, bend] which is the meaning that survives into the modern lan-
guage. The suggestion of an etymological connection between *teke^{em}* and Lat. *texō* etc. seems to go back to Meillet (1894, 289)
who, in accordance with the earliest documentation, translates “‘fabriquer’ et en particulier ‘aiguiser’”.

34. IEW 1057-1058.

35. LIV 618-619.

36. The Ossetic verb *taxun*, mentioned in IEW with the translation ‘weben’, rather means ‘equip, dress up’ and thus does not belong
here (Cheung 2007, 374).

37. Cf. Beekes 2010, 1484.

38. For the exact meaning of the Hittite verb, cf. Melchert, forthcoming.

39. Cf. Schmitt 1967, 297.

it is even possible that Greek *τέκτων* is rebuilt from **teksōn* on the model of the agent noun **teks-tor-* = Latin *textor* ‘weaver’.⁴⁰ At any rate there seems to be a lexical connection between simply ‘fitting together’, as in the Hittite verb, and the two more specialized craftsman’s terms ‘building’ or ‘doing carpentry’ on the one hand, ‘weaving’ on the other. Presumably, the connecting link is the use of wattling in the construction of houses.⁴¹

This brings us to the curious formal identity of the roots of Armenian *hiws* ‘plait (of hair)’, *hiwsel* ‘to plait’ and *hiwsn* (pl. *hiwsunk* < **-ones*) ‘carpenter’ where it is tempting, but formally problematic to venture an equation with *takšan-* and *τέκτων*. The equation was already assumed by Ačaryan,⁴² and later elaborated by Winter⁴³ who, apart from dealing with the doubtful internal cluster, had to postulate a dialectal development **t- > h-* rather than the regular *t̥-*. Klingenschmitt’s alternative derivation from a reduplicated **pi-pk̆-* from the root **pek̆-* ‘pluck; comb’⁴⁴ is phonologically impeccable, but morphologically ad hoc. Moreover, the semantic development is far from obvious, as is also the case of the alternative derivation from **peṣk̆-*. Perhaps the most promising suggestion is Martirosyan’s tentative comparison with Lithuanian *sūkti* ‘turn’, Old Russian *sv̋kati* ‘twist, twine’, Russian *sukat* ‘twist, spin’⁴⁵ which is at least semantically satisfactory for *hiws*, *hiwsel*, while the stem formation of *hiwsn* may have been influenced by the

pre-Armenian match of *takšan-*, *τέκτων*.⁴⁶

The inherited textile vocabulary includes not only the word for the ‘web’ as such, but apparently also the more specialized terms for ‘warp’ and ‘woof’. The word for the ‘warp’ is either *arēj*, lit. ‘that which goes down’⁴⁷ or *azbn*, while the ‘woof’ is *ʿezan*, cf. e.g. Levit. 13.52: *Ew ayrescē z-jorjn etē arēj icē etē ʿezan y-asveac kam i ktaweac* ‘And he shall burn that garment, whether the warp (στήμωνα) or woof (κρόκην), in woollen or in linen’.

In Armenian historical linguistics it is all too often the case that a proposed etymology depends on a sound law that is founded on one or two stray examples, as is also the case of *azbn*. Two nouns in Classical Armenian end in *-zbn*, *skizbn* ‘beginning’ and *azbn* ‘warp, chain in weaving’ (cf. Olsen 1999, 369-370). While an indigenous suffix *-mn/-man* is well attested, we have no comparative evidence whatsoever for a similar suffix with **-b̥-* (> *-b-*) instead of **-m-*. Consequently, *skizbn* and *azbn* either belong to some undefined substratum in which case we can stop worrying about them from an Indo-European comparative point of view, or they are inherited after all if *-bn* for *-mn* is due to some sophisticated conditioned sound law. Already in the early 19th century, Holger Pedersen⁴⁸ suggested a regular development *-zmn-* to *-zbn-* to account for these words, and since both of the basic roots stand a good chance of being inherited, it does seem sensible to look for a historical explanation for the suffixal elements as well.⁴⁹

40. In that case **tetk̆-* might be dispensed with since Vedic *takšan-*, Avestan *tašan-* etc. are ambiguous. Cf. Mayrhofer p. 156 in Cowgill & Mayrhofer 1986, and EWAia I, 612-614, and see also the thorough discussion in Lipp 2009, II, 217-235.

41. Mallory & Adams 1997, 139.

42. Ačaryan III, 201.

43. Winter 1962, 262 and 1983.

44. Klingenschmitt 1982, 133-134 and 217.

45. Martirosyan 2010, 410-412. Root **seuk-*; **-k-* regularly palatalized after **-u-*.

46. A lengthened grade **-ēu-* which regularly yields *-iw-* would be morphologically peculiar, so the value of the comparison depends on the expected outcome of the diphthong **-eu-*. Usually **-eu-* and **-ou-* are assumed to merge with the end result *-oy-*, but as argued by de Lamberterie (1982, 81-82), there are no incontestable examples of **-eu-* > *-oy-*, so it is possible that **-eu-* > *-iw-* is regular. Besides *hiws* (*hiwsel*, *hiwsn*) de Lamberterie points to *hiwcanim*, aor. *hiwcay* ‘pine away’: Goth. *siuks* ‘ill’ < **seuḡ-/seuḡ-* (cf. also IEW 915). Another potential example would be *ʿiw* (o-st.) ‘number’ < **teuḡhos* (cf. Ved. *tavás-* ‘strong’, Av. *tauuah* ‘power, strength’) where we could avoid an inconvenient case of vṛddhi. As for the apparent exceptions *k̆oyr* ‘sister’ < **k̆eur* < **suesōr* and the suffix *-oyr̥* (i-st.) = Greek. *-ευσίς* < **eh₁uti-*, the hiatus between *-e-* and *-u-* may have remained until the development **-eu-* > *-iw-* (followed by the later merger of **-eu-* and **-ou-*) was completed.

47. Cf. Greek *στήμων* ‘that which stands up’.

48. Pedersen 1905, 217.

Between *azbn* and Greek ἄσμα ‘warp’ (usually διάσμα) there exists a both very precise and very specific semantic correspondence, which can hardly be accidental. Thus Judg. 16.13: *Et ē ankē es z-ewt anasin gitaks glxoy imoy and azbin* translates Greek Ἐὰν ὑφάνῃς τὰς ἐπτὰ σειρὰς τῆς κεφαλῆς μου μετὰ τοῦ διασματος “If thou weavest the seven locks of my head with the web”. The corresponding Greek verb ἄττομαι < *ἄτ-jo-μαι ‘set the warp in the loom’, i.e. ‘start the web’, has been convincingly connected with Hittite *hatt-* ‘pierce, prick’ by van Beek (apud Beekes 2010, 167).⁵⁰ From a formal point of view the Greek form is an exact match of the Hittite *i*-present *ha-az-zi-zi*, to be read /ht̪étsi/ < *h₂t-jé-ti,⁵¹ but the semantic specialization pertaining to textile terminology must have taken place at a time after the separation of the Anatolian branch from the Indo-European family, i.e. not earlier than “Core Indo-European” and perhaps as late as the predecessor of the Greek-Armenian(-Albanian-Phrygian) subbranch.

Tezan ‘woof’ has no generally accepted etymology. A connection with the root “(s)tegh- ‘stechen’”, as in Old Icelandic *stinga* ‘sting, stitch, stab’, Old Church Slavic *o-stegnŭti* ‘tie, knot, chain’, Russian *stegat* ‘quilt’⁵² has been rejected because the Slavic forms would point to a velar *-gʰ-, while Armenian -z- must represent the lenition product of an intervocalic palatal *-ǵʰ-. However, the semantic correspondence is remarkable, cf. also Shetland *sting* ‘sew, stich together’, Danish *sting* ‘a stitch’, and the formal problem would be solved by a Slavic borrowing from Germanic.

Even the word for the beam of a loom, *stori*, may

be based on an inherited lexeme, **storchio-*, from the same root as Middle High German *star* ‘stiff’ and in particular Old High German *storro* ‘wooden block’.⁵³

Textile terms based on inherited roots further include *kʷul* ‘thread’, reconstructed by Jāhukyan as **kōlo-* and compared with Latin *colus* ‘distaff’.⁵⁴ The reconstruction may be adjusted to **kʷōlh₁o-* from **kʷelh₁-* ‘turn’ as a *vṛddhi* derivative ‘pertaining to the spindle’ (?),⁵⁵ but there may be other possibilities such as a zero-grade formation **kʷlh₁o-* with rounding of the sonant after labiovelars. The semantically related *aslani* ‘thread, ribbon’ is internally derived from *aseln* ‘needle’, based on the root **h₂ak-* ‘(be) sharp’ and belonging to the same subset as *aleln* ‘bow’ and *tʰitʰeln* ‘blade’. The derivational details are not quite clear, but at least we seem to be dealing with a close cognate of Old High German *ahil* ‘awn’, Middle English *eile* ‘awn, prickle’.⁵⁶

Terminology of garments

The inventory of inherited words for garments is quite scarce. The generic term *z-gest* (*u-st.*) ‘garment, clothing’ is a compositional *tu-stem*, including the prefix *z-* which, at least functionally, corresponds to Ved. *abhi-* < **h₂mbʰi-*⁵⁷ and the *tu-stem* **-gest* < *-uestu-* as opposed to the Latin *ti-stem* *vestis*.⁵⁸ A similar formation is *z-ard* ‘ornament, finery’, also an original *tu-stem* **-h₂ar-tu-* or **-h₂r-tu-*; however, the cognates, Vedic *ṛtú-* ‘the right time; rule, order’, Hes. ὀρτύς ὀύνταξις, Latin *artus* ‘limb’ are not associated

49. Cf. Klingenschmitt (1982, 224) for a discussion of *skizbn* and the related verb *sksanim* ‘begin’. The origin of the crucial cluster is not exactly identical in the two cases: (*-*knn*? >) *-*smn* > *-*zmn* in *skizbn*, *-*tmn* > *-*smn* > *-*zmn* in *azbn*.

50. Van Beek apud Beekes 2010, 167.

51. Cf. Kloekhorst 2008, 331. The verb is also continued in Lycian *xttadi/xttaiti* ‘wounds’ (LIV 274 with references).

52. LIV 687. Cf. also Olsen 1999, 300, and Martirosyan 2010, 283 with reference to Saradževa 1986.

53. Ačařyan IV, 278. Cf. also Martirosyan 2010, 300 for a thorough discussion of the enigmatic *il, ilik* ‘distaff, spindle’.

54. Jāhukyan 1987, 83.

55. Olsen 1999, 195–196.

56. The Germanic protoform is usually reconstructed as **ahila-*/**agila-*, but instead we might be dealing with an instrument noun **h₂akēto-* of the type Old Norse *lykill* ‘key’ < **luk-ila-z* < **-etlo-* ‘instrument for closing’ according to Rasmussen’s analysis (1999, 651–651). The exact phonetic basis of the Armenian derivative is somewhat uncertain.

57. Cf. also the verb *z-genum* ‘dress’: Vedic *abhi-vas-* ‘dress’. The stem formation of the corresponding Greek verb ἔννυμι < **ues-nu-* is identical with the Armenian (LIV 693 and Klingenschmitt 1982, 248). On the etymological relationship between *z-* and *abhi-* etc., cf. Manaster Ramer ms. apud Olsen 2002.

58. The *u-stem* inflection may well be an archaism since *tu-* rather than *ti-* stems in Vedic are habitually found after prefixes, cf. Wackernagel-Debrunner 1954, 651.

with clothing.⁵⁹

More specific terms include *awjik* ‘collar’, presumably a derivative of a stem **(h)ang^{whi}-* or **(h)ng^{whi}-*, related to Greek *αῶχην*, Aeolic *ἄμφην* ‘neck’,⁶⁰ and perhaps *p^{elk}* ‘rough mantle’ (also ‘curtain’) which has been connected with Greek *πέλας*, Lat. *pellis* ‘skin’ and the semantic close match of Old Prussian *pelkis* ‘mantle’, allegedly from the same root as Gothic *filhan* ‘envelop’ → ‘bury, conceal’.⁶¹ The root final **-k/g-* (**-g-* > Arm. *-k-*) may be dealt with as an indication of “laryngeal hardening” which would point to an original root noun **pelh-s*, whence the Gothic denominative verb.⁶² Another indigenous term for a garment may be *ter* ‘thin veil (for covering the head)’ if Ačařyan’s derivation from the root **der-* ‘skin’ is correct.⁶³ In that case we would be dealing with a narrowing of an older meaning ‘hide, covering’ and have an exact match in Greek *δέρις* ‘hide, skin’, but also ‘screen (used in a siege)’ < **dersi-*.⁶⁴ A ‘cover’ or ‘garment’ may also be described as a *verarku*, lit. ‘thrown over’, a loan translation from Greek *περιβολαίον*.⁶⁵ Finally, a few words for ornaments are based on inherited roots: the *a*-stem *gind* ‘earring’ from the root **uend^h-* ‘turn, twist, weave’ as in Gothic *windan* etc., and *matani* ‘ring’, internally derived from *matn* ‘finger’ with cognates in Old Welsh *maut*, Middle Breton *meut* ‘thumb’.

Otherwise, the general picture is dominated by Iranian loanwords, thus the generic terms *patnowčan* ‘garment’, Pahlavi *ptmwcn*, and *handerj* ‘clothes, clothing’ from an Iranian protoform **han-dardⁱ-*, cf. Pahlavi *drc* ‘seam’.⁶⁶ The underlying Iranian root *darz-*, also reflected in Middle Parthian *drz-* ‘tie on,

load (pack-animals)’,⁶⁷ is probably Indo-European **d^herǵ^h-* ‘turn’ with a semantic development to ‘twist, spin’ as also in Albanian *dreth* ‘turn; spin’.⁶⁸ The inherited Armenian verb *dar^{nam}*, aor. *darjay* < **d^hrǵ^h-* has preserved the original meaning ‘turn’, but one may consider if the otherwise etymologically unclear *jorj* (*o*-st.) ‘garment, coat, cloth, veil’, pl. ‘clothes’ could not be an inherited *b^hóros*-derivative **d^hórǵ^hos* with distant assimilation **dorj* > *jorj*, i.e. [dord^z] > [dʒord^z]. If so, the joint evidence of Iranian, Armenian and Albanian would point to an extension of meaning ‘turn’ → ‘spin’ as common heritage.

The number of nouns of Iranian origin for specific garments and other specialized textiles is quite impressive, thus:

- *šapik* ‘shirt’, cf. Middle Parthian *špyk* ‘undershirt’, originally ‘nightshirt’, a substantivized derivative of the word for ‘night’, Avestan *xšap-*, Vedic *kṣāp-*.
- *varšamak* ‘napkin, apron’, cf. Sogdian *w’ša’my*, Chwarezmian *w’š’myk* ‘veil for the head’.⁶⁹
- *t^askinak* ‘handkerchief, sudarium’, corresponding to Pahlavi *tšknk* ‘undershirt’, from an Iranian protoform **taršikainaka-* or the like, cf. Avestan *taršu-* ‘dry’ with *t-* > *t^c-* as in e.g. *t^cag* ‘crown’ < Iranian *tāg-*.
- *vtavak* ‘shift, shirt, robe’, used about the ephod or priestly robe, possibly a derivative of the stem continued in Pahlavi *wyt’b-* [witāβ] ‘shine’ in which case the original meaning would be a shining or simply white garment.
- *lenjak* ‘towel’ via an intermediary Iranian source ultimately from Latin *linteum* ‘anything made of

59. Cf., again with the prefix **h₂mb^hi-*, Avestan *aiβi-* + *ar-* ‘figere’ (Olsen 1999, 107-108).

60. Cf. also Clackson 1994, 107-109 with discussion.

61. Feist 1939, 151.

62. Olsen 1999, 93-94.

63. HAB IV, 442; cf. also Martirosyan 2010, 610.

64. There is no particular reason why *δέρις* would go back to a **-ti*-stem **der-ti-* (which would have yielded Armenian **terd*) as assumed by Clackson (1994, 54). Cf. de Lamberterie 1997, 74-76 for a common Greco-Armenian formation and Praust 2000 for further discussion of the root.

65. Olsen 1999, 542.

66. From the same root also Armenian *derjak* ‘tailor’, Pahlavi *dlcyk*.

67. Boyce 1977, 26.

68. IEW 258.

69. Cf. Benveniste 1958, 70 and Périkhanian 1968, 25.

- linen, towel etc.’.⁷⁰
- *vižakk^c* ‘covering’, used in the Exodus about the Ark of the Covenant, has been compared with Khotanese *pvīys-* ‘cover’ < **pati-vaiz-* by Bailey.⁷¹
 - *gawti* ‘girdle, belt’, perhaps < Iranian **gaftia-* from **g^hab^h-* ‘hold’;⁷² cf. also *paregawt* below.
 - *kamar* ‘girdle’, cf. Avestan *kamāra-*, Pahlavi *kml* ‘waist; belt, girdle’.
 - *zankapan* ‘stocking’ or the like, cf. Pahlavi *zng* ‘ankle, shank’ + the Iranian stem *-pāna-* ‘protecting, protector’. A similar formation is the semicalque *sṛnapank^c* ‘greaves’ whose first member is the inherited *srownk^c* ‘shank’ (cf. Latin *crūs* etc.), similar to Gathic Avestan **rānapānō* “qui protège la jambe, la jambière”.⁷³
 - *grapan* ‘seam at the neck’ (lit. ‘neck-protector’), cf. Modern Persian *girīban* ‘neck-guard, gorget’, a formation parallel to *zankapan*. For the initial member of the compound, cf. Pahlavi *glyw’* ‘neck, throat’, Avestan *grīuuā-*.
 - *paregawt* ‘tunic, coat’, like Greek *παραγαύδης, παραγαύδιον* ‘garment with a purple border’ of Iranian origin, cf. *gawti*.
 - *vartik^c* ‘breeches’ with the compound *andravartik^c*, presumably from a stem **vartia-* based on the root *var-* ‘cover’; this Iranian loan is matched by Arabic *andarvart*, *andarvardiyya*.⁷⁴
 - *patrowak* ‘veil, covering’, almost certainly of Iranian origin though the exact source is unknown.
 - *drawšak* ‘hem, corner (of clothes)’, a derivative of *drawš* ‘banner’, Pahlavi *dlwš* ‘mark’ etc.
 - *žapawēn* ‘hem, border of a garment, undoubtedly Iranian, cf. *apawēn* ‘refuge, protection’.⁷⁵
 - *kawšik* ‘shoe’, corresponding to Pahlavi *kpš, kpšk* ‘id.’.
 - *k^curj* ‘sack, garment of sackcloth’, a *Wanderwort* borrowed from Iranian into Armenian as well as Arabic *kurz*.⁷⁶

On the other hand, the Greek contributions to the old Armenian textile vocabulary are relatively modest: *lōdik* ‘cloak’ from Greek *λῳδίζ, λῳδίκιον*; *k^clamid* ‘robe, cloak’ from *χλαμύς, -ύδος*; and *p^cilon* ‘cloak’⁷⁷ from *φελόνης, φαιλόνης*. Not only Greek itself, but also the Hebrew elements in the Septuaginta has left sporadic traces in the Armenian Bible, e.g. *badēn* ‘linen garment’,⁷⁸ a rendering of the Hebrew loanword in Greek *βαδδίν*, apparently with secondary influence from the suffix *-ēn* characteristic of adjectives of material. Similarly, the Syriac element is restricted to a few words: *amlan* ‘gown’;⁷⁹ *xlay* ‘coat’;⁸⁰ and possibly *xanjarowr* ‘swaddling band’, pl. ‘swaddling clothes’.⁸¹ The etymological background of *k^cawl* or *k^col* ‘veil’,⁸² and *bačkon* ‘cloak’, translating Greek *ἱμάτιον*,⁸³ is unclear.

As is natural, the Iranian military domination also affects the terminology of military outfit as seen from the following examples:

- *pateank^c* ‘armour’ from Iranian **patayāna-*, **patiyāna-* or the like, containing the stem of the verb *patem* ‘surround, enclose’ (cf. e.g. also *arcat^capat* ‘covered with silver’) which probably reflects an Iranian version of the root

70. Ĵahukyan 1987, 631-631.

71. Bailey 1979, 258.

72. Olsen 1999, 874 and for the root IEW 407-408.

73. Kellens 1974, 330-332.

74. Ĵahukyan 1987, 547.

75. Cf. Benveniste 1964, 6.

76. Hübschmann 1897, 258; Ačāryan IV, 595-596.

77. 2.Tim.4.13.

78. Dan.12.6-7.

79. Josh.7.21; Syriac *āmellā*.

80. Syriac **xil’ā*; Ačāryan II, 372.

81. Hübschmann 1897, 317.

82. Ačāryan IV, 585-586.

83. Ačāryan I, 400.

**peth*₂- ‘spread out embrace’.⁸⁴

- *varapanak* ‘(military) cloak’, lit. ‘breast-protector’, cf. Avestan *varah-* ‘breast’ and *-pan-* as in *zankapan* ‘stocking’, *sṛnapank*^c ‘greaves’. The original source of *zrahk*^c ‘armour’⁸⁵ with the reflex *-h-* of Iranian *-δ-*, cf. Avestan *zrāda-* ‘armour’, is apparently neither Middle Parthian nor Middle Persian from which we expect *-r-* and *-y-* respectively, but rather a third branch of Middle Iranian, though the word may have been transmitted through one of the two main dialects.
- *kštapanak* ‘armlet for the right arm’ with the literal meaning ‘side guardian’, cf. *kowšt* (side) → ‘belly’, Pahlavi *kwst* ‘side, direction’ (but Modern Persian *kušt* ‘belly’) and the same final element as in *varapanak*.
- *salawart* ‘helmet’ from a formation similar to Avestan *sārauuāra-* ‘helmet’,⁸⁶ lit. ‘head-concealer’ though the stem formation of the final member in the Armenian version is not an *a*-stem, as in Iranian, but either an extended root noun (Indo-European **-uṛ-t-*) or a *-ti*-stem (**-uṛ-ti-*).

Taratok ‘(soldier’s) cloak’ is etymologically obscure, cf. Martirosyan 2010, 602 with references.

Similarly, the vocabulary of ornaments, jewelry and royal attire is heavily influenced by Middle Iranian:

- a prominent example is *tʰag* ‘crown’, cf. Manichaean Middle Persian *tʰg* [tāg] ‘arch’ and the Modern Persian palatalized version *tāj* ‘crown’. Bolognesi derived Arm. *tʰag* and Persian *tāj* independently from the same root as Greek *στέφανος*

<*(*s*)*teg*^{wh}- on account of the initial *tʰ-* which he considered incompatible with an Iranian loan.⁸⁷ However, there are other examples of such a development, e.g. *tʰakoyk* ‘vessel, goblet’ vs. Middle Persian *tkwk* ‘drinking vessel’, and moreover, Benveniste’s ingenious derivation of *tʰagowhi* ‘queen’ from **tāga-br̥θyā-* ‘crown-bearer’ (f) strongly suggests an Iranian origin of both compositional members.⁸⁸ The relation between *tāg*/*tāj* and *στέφανος* may still be maintained: *tāg* from a “tomós”-type **tog^{wh}ós* and *tāj* a hybrid formation between *tāg* with Brugmannian lengthening and a competing *s*-stem **teg^{wh}es-*, like *στέφανος*, with *e*-grade and palatalization.

- *psak* ‘crown, garland’, cf. Pahlavi *pwsḡ* ‘garland’, Avestan *pusā-* ‘tiara’.⁸⁹
- *xoyr* ‘mitre, diadem, bonnet’, cf. Avestan *-xaoḍa-* ‘helmet’; hence also *artaxowrag* ‘covering, tiara’.
- for the compound *mehewand* ‘necklace’, whose final member *-awand* clearly reflects Iranian **-banda-* ‘band’,⁹⁰ Bailey suggested a first member **mṛjū-*, whence Avestan *mārəzu-* ‘neck’ or ‘vertebra’;⁹¹ this was later improved by Gippert to **mṛjūiia-band-* which would explain the connecting *-e-*.⁹² However, the phonetic development **-rjū- > -h-* has no recognized parallels, so as an alternative explanation Olsen has suggested a protoform **miθriya-βanda-* from a stem related to (Iranian →) Greek *μίτρη* ‘headband’ etc.⁹³
- *aparanjan* ‘bracelet’, cf. Modern Persian *abranjan*.
- *čelanak* ‘sort of head ornament’, probably ‘hair pin’, is a diminutive of the Middle Iranian word

84. LIV 478-479; cf. further Avestan *paθana-* ‘wide, broad’. From the same root we also have *patan* ‘bandage’, *diapatik* ‘embalmer’, a compound with the probably inherited *dī* ‘dead body’, and *patand* in the phrase *aṛnowl i patand* ‘take hostage’ (lit. ‘into enclosure’). In view of the missing sound shift, the verb cannot be indigenous in Armenian.

85. Bolognesi 1960, 42; Schmitt 1983, 84 and 90.

86. Benveniste 1958, 69.

87. Bolognesi 1948, 14.

88. Benveniste 1945 [1946], 74.

89. Cf. also the Tocharian A loanword *pässäk* (Isebaert 1980, 158 and 200).

90. Cf. Middle Parthian *bnd*, Avestan *banda-*.

91. Bailey 1989, 1-2.

92. Gippert 1993, 140.

93. Olsen 1999, 895. Cf. for the phonetics *mehean* ‘temple’ from Iranian **miθriyāna-* ‘Mithra-sanctuary’.

- for ‘dagger’, Pahlavi *cyl’n*.⁹⁴
- *sndus*, translating Gk. *τρίχαπτον* ‘fine veil of hair’ in Ezek. 16.10, cf. Modern Persian *sundus* ‘species panni serici tenuis’.
- *pačoyč* and *pačučank* ‘attire, toilette, ornament’, cf. Meillet 1922.
- *čamuk* ‘decoration, ornament’, apparently also of Iranian origin though the details are unclear, cf. Ačāryan III, 180.
- *p^ološuk* ‘hair-clasp’ looks like a derivative of the etymologically unclear *p^ološ* ‘moray’, the clasp perhaps compared with the jaws of the fish.

The ultimate origin of *maneak* ‘necklace’, Greek *μανιάκης*, is also likely to be Iranian, while the background of *k^aayr* ‘necklace’ is unknown.

Textile techniques, dyes and decorations

As we have seen, the words pertaining to basic textile production such as spinning and weaving mainly have an indigenous background, but when it comes to more advanced techniques and the production of luxuries, the Iranian influence has left its unmistakable mark. An interesting example is the agent noun *nkarakert* ‘embroiderer’.⁹⁵ While the first member of this compound is clearly *nkar* ‘picture; variegated’,⁹⁶ the final stem differs semantically from other formations in *-(a)kert* < **-kṛta-* ‘-made’ with the expected passive meaning of the participle. This is what we find in the semi-calques *jerakert* ‘hand-made’, *p^aaytakert* ‘made of wood’ or the complete loanword *ašakert* ‘disciple’, Manichaean Middle Persian *hš’gyrd* ‘disciple, pupil’, according to Benveniste’s brilliant analysis a South West Iranian loan whose first member corresponds to

Old Persian *hašiya-* (Avestan *haiθiia-*) ‘true’, so that the original meaning would be ‘qui est rendu authentique, accompli’.⁹⁷ The discrepancy of verbal voice in *nkarakert* is not readily explained, and for this reason it seems worth considering if we could not be dealing with a different root. An obvious candidate is Indo-Iranian **kart-* ‘spin; stretch a tread’. Incidentally such a root is attested in RV *út kṛṇatti*, and from Iranian probably Chwarezmian *kncṣ-* ‘twist’.⁹⁸ In that case a *nkarakert* would simply be a ‘picture-weaver’ or ‘picture-embroiderer’ and thus be etymologically distinct from Pahlavi *ng’rgr* (*-kar*) which would be a ‘picture-maker’, i.e. a painter. From the same semantic field and with the same first member we also find *nkarakerp* ‘variegated, embroidered’ where the final member is *kerp* ‘form’, cf. Manichaean Middle Persian *qyrb* ‘form, shape’ < Indo-European **-k^wrp-*, etymologically related to Latin *corpus* etc.

Words for precious materials borrowed from Iranian may be exemplified by *dipak* ‘brocade’, Pahlavi *dyp’g*, and *zaṛnawowxt* ‘silken’, originally ‘interwoven with gold’, i.e. **zarna-vufta-*, cf. Sogdian *zyrnywfc* with the same final participle, ‘woven’, as *čačanawowxt* ‘variegated, multi-coloured’. However, one designation for a luxury article, the word for scarlet, *ordan*, is indigenous, derived from *ordn* ‘worm’,⁹⁹ and thus semantically comparable with Old Church Slavic *čr̃mьnъ* ‘red’ which is related to *čr̃vnъ* ‘worm’.¹⁰⁰ This is hardly surprising, considering the fact that Armenia is the homeland of the Armenian or Ararat cochineal, a scale insect of which a precious crimson dye has been produced from ancient times. It is thus not unthinkable that for once the Iranian word which is the source of the European words for crimson

94. Cf. Ačāryan III, 195; MacKenzie 1971, 22.

95. Olsen 265-266.

96. Cf. Manichaean Middle Persian *ng’r* ‘image, picture’, Modern Persian *nigār* ‘painting, picture’.

97. Benveniste 1945, 69-70.

98. Cf. EWAia I, 316. Thus **kert-* (LIV 356), besides **spen(h)-* and **sneh₁(i)-*, would be another inherited root with the meaning ‘spin’. Eichner (1974, 98; cf. also Kloekhorst 2008, 459-460) has adduced a possible cognate in the Hittite noun *karza-/karzan-* ‘spool’ or ‘bobbin’.

99. While *ordn* has no recognized etymology, a remodelling or contamination between the protoforms of Latin *vermen* and Sanskrit *kṛmi-* ‘worm’ is hardly out of the question, cf. Olsen 1999, 127.

100. This belongs with the widespread word family also represented by Sanskrit *kṛmi-* ‘worm; spider; shield-louse’, Lithuanian *kirmis* ‘worm’ etc. French *cramoisin*, English *crimson*, Dutch *karmozijn* etc. derive from Medieval Latin *carmesinus*, a derivative of a borrowing from Arabic *qirmiz* whose ultimate source is Persian *qirmiz*.

(cf. note 100) is a calque from Armenian.

Another red dye is scarlet, Armenian *janjaxarit^c*, produced from the insect Kermes vermilio,¹⁰¹ mainly feeding on a species of oak trees, *quercus coccifera*, in the Mediterranean region. The only early Armenian attestation is from Isaiah 1.18 where we have a parallel of the red scarlet and crimson as opposed to the white snow and wool: *Ew et^cē ic^cen melk^c jer ibrew z-janjaxarit^c, ibrew z-jiwn spitak araric^c, ew et^cē ic^cen ibrew z-ordan karmir; ibrew z-asr sowr araric^c* “Though your sins be as scarlet (Greek “ὡς ποινικοῦν”), they shall be white as snow; though they be like red crimson, they shall be as pure wool”. According to Ačařyan,¹⁰² we are dealing with a Semitic loanword, cf. Syriac *zəxōrīṯā* ‘cocum, red worm’. Apparently the stem *janjir-* (*janjir arnel* ‘tire, annoy’) has played a supplementary folk-etymological role, cf. the alternative spelling *janraxarit^c* and the later meaning of *janjaxarit^c*, ‘dark, dull red’.

The semantically related *cirani* ‘purple; of purple, purple coloured’, most likely has an Iranian origin. Obviously the stem is connected with *ciran* ‘apricot’, and with a basic meaning ‘golden’ we may compare with the family of Avestan *zaraniia-*, Sogdian *zyrn*, Vedic *hīraṇya-* ‘gold’, i.e. Indo-European **ǵ_h₃(e)n-* via a dialectal Iranian protoform **d^hiran-* under the assumption that the loan precedes the stage of mediae > tenues of the Armenian soundshift. Such very early loans are rare, but apparently not quite exceptional,¹⁰³ cf. the notable example of *partēz* ‘garden’ with **-d-* > *-t-* (Avestan *pairi-daēza-*), and probably also *arcat^c* ‘silver’ from IE **(h₂)rǵnto-* (Avestan *ərəzata-*, Latin *argentum*), again from a dialectal

Iranian protoform with affricate from original palatal, i.e. **ard^hata-* > *arcat^c*.¹⁰⁴

In connection with the discussion of garments and materials it may be worthwhile to have a brief look at the colour terms, though of course these are also used in other contexts. For the essential concept of ‘colour’ the Armenian noun *goyn* (o-st.) is of Iranian origin, cf. Avestan *gaona-*, Pahlavi *gwn*.¹⁰⁵ The stem is also widely attested in composition, and in the reduplicated *gownak gownak* in Jud.15.15: *psaks gownaks gownaks*, probably ‘multicoloured wreaths’. A more specialized term is *erang* ‘colour, dye’, cf. Pahlavi *lng*, Sanskrit *raṅga-*, while ‘dye’ or ‘coloured, embroidered material’ is expressed by the loanword *narawt* which has been compared with Khotanese *nar-* by Bailey.¹⁰⁶ Likewise, most of the specific colour terms have an Iranian background, thus:

- *pisak* ‘spotted, speckled’,¹⁰⁷ a derivative of **paisa-*, Avestan *paēsa-* ‘ornament’.
- *spitak* ‘white’ with the North West Iranian development of **k_u-* > *sp-*, cf. Pahlavi *spyt^k*, Sanskrit *śveta-*.
- *seaw* ‘black’, cf. Middle Parthian *sy’w*, Avestan *siiāuua-*.
- *karmir* ‘red’, cf. Sogdian *krm* ‘yr’.
- *kapoyt* ‘dark blue’ and *kapowtak* ‘bluish’ where the original meaning would have been ‘dove-coloured’, cf. Pahlavi *kpwt* ‘grey-blue; pigeon’, Old Persian *kapautaka-*, probably ‘blue’, Vedic *kapōta-* ‘pigeon’.

The historical background of *kanač^c* ‘green’¹⁰⁸ and

101. The Latin name is taken from the above-mentioned word for ‘crimson’.

102. Ačařyan III, 145-146.

103. Cf. the discussion in Olsen 2005.

104. De Lamberterie 1978, 245-251.

105. This noun has had a tremendous success in Armenian, first in compounds as complete loanwords, e.g. *vardagoyn* ‘rose-coloured’ (Sogdian *wrōywn*), *karmiragoyn* ‘reddish’ (Sogdian *krm* ‘yr *ywn* ‘k ‘of red colour’) or semi-calques such as *oskegoyn* (*oski* ‘gold’) beside Sogdian *zyrnywn(č)* ‘gold-coloured’, then from the nucleus of colour adjectives to a general adjective suffix describing appearance or manner, e.g. *mardasiragoyn* ‘in a gentle manner’, and finally we find full grammaticalization in the usual comparative/relative suffix. In modern Armenian, *-goyn* is used to express the superlative.

106. Bailey 1989, 174.

107. Originally only used about animals such as horses and goats. On the whole, the vocabulary pertaining to horses is strongly influenced by Iranian on account of their military importance.

108. Ačařyan II, 510-511.

gorš 'grey'¹⁰⁹ is unknown, and of the basic colour terms only *delin* 'yellow' has a plausible Indo-European etymology.¹¹⁰

This selection of textile terms from Classical Armenian testifies to a rich and varied vocabulary, historically shared between a foundation of inherited lexical material and an influx of cultural loans from the politically and culturally dominant Iranians. Our sources do not permit us to go beyond the stage of the reconstructed Indo-European protolanguage, but we do know for certain that the area now inhabited by Armenians has a long tradition of advanced textile technology. In a cave in Vayoc' Jor in the southern part of Armenia, archaeologists have excavated a beautifully sown moccasin, "the world's oldest shoe", dated to about 3500 BC.¹¹¹ What language its wearer spoke and what words he or she would have used to describe it, its material, colour and fabrication, we shall never know.

Abbreviations

Ciakciak = P.W. Ciakciak: *Baġirkē barbar hay ew italkan* I-II. Venetik 1837.

EWAia = Manfred Mayrhofer: *Etymologisches Wörterbuch des Altindoarischen*. Heidelberg 1986-2001. Heidelberg.

IEW = Julius Pokorny: *Indogermanisches etymologisches Wörterbuch*. Bern, 1959.

LIV = *Lexikon der indogermanischen Verben. Die Wurzeln und ihre Primärstambildungen*. Unter Leitung von Helmut Rix und der Mitarbeit vieler anderer bearbeitet von Martin Kümmel, Thomas Zehnder, Reiner Lipp, Brigitte Schirmer. Zweite, erweiterte und verbesserte Auflage bearbeitet von Martin Kümmel und Helmut Rix. Wiesbaden, 2001.

Nor Baġirkē = *Nor Baġirkē haykazean lezowi* I-II. Venice. Reprint Erevan 1979-81.

Bibliography

109. Ačařyan I, 584.

110. Apparently a derivative of the same root as *del* 'herb' (cf. also *delj* 'peach', *deljan* 'blond', *dalukn* 'jaundice') which would match Latin *helus* > *holus* 'herb' < *ġ^hélh₃os except for the initial *ġ^h-, regularly yielding *j*-, i.e. [d^z]. Perhaps the stem was contaminated with the semantically related *dalar* 'fresh and green' = Greek *θαλερός*.

111. Cf. Pinhasi *et al.* 2010.

Ačařyan, Hr. (1971-79) *Hayeren Armatakan Bařaran*, I-IV, Erevan (1. ed. 1926-35).

Anthony, D. (2007) *The horse, the wheel and language*. Oxford.

Bailey, H. W. (1979) *Dictionary of Khotan Saka*. Cambridge.

Bailey, H. W. (1989) Two Armeno-Iranian Etymologies. *Annual of Armenian Linguistics* 10, 1-4.

Beekes, R. (2010) *Etymological Dictionary of Greek*, 1-2. Leiden – Boston.

Benveniste, É. (1945) Études Iraniennes III. Emprunts iraniens en arménien. *Transactions of the Philological Society* 1945 [1946], 68-78.

Benveniste, É. (1958) Mots d'emprunt iraniens en arménien. *Bulletin de la Société de Linguistique de Paris* 53, 5-71.

Benveniste, É. (1964) Eléments parthes en arménien. *Revue des Études Arméniennes* NS 1, 1-39.

Bolognesi, G. (1948) Pers. *tāj*, Arm. *řag*. *Atti del Sodalizio Glottologico Milanese* I, 1, 14-15.

Bolognesi, G. (1960) *Le fonti dialettali degli imprestiti iranici in armeno*. Milano.

Boyce, M. (1977) *A Word-List of Manichaean Middle Persian and Parthian with a reverse index by Ronald Zwanziger*. Teheran – Liège – Leiden.

Cheung, J. (2007) *Etymological Dictionary of the Iranian Verb*. Leiden – Boston.

Clackson, J. (1994) *The Linguistic Relationship between Armenian and Greek*. Publications of the Philological Society 30. Oxford – Cambridge.

Cowgill, W. & M. Mayrhofer (1986) *Indogermanische Grammatik*, Band I – 1/2. Heidelberg.

de Lamberterie, Ch. (1978) Armeniaca I-VIII: Études Lexicales. *Bulletin de la Société de Linguistique de Paris* 73, 243-283.

de Lamberterie, Ch. (1982) Revue de R. Schmitt, Grammatik des Klassisch-Armenischen (1981). *Bulletin de la Société de Linguistique de Paris* 77.2, 80-84.

de Lamberterie, Ch. (1997) Review of James Clackson, *The Linguistic Relationship between Armenian and Greek* (1994). *Kratylos* 42, 71-78.

Eichner, H. (1974) *Untersuchungen zur hethitischen Deklination*. Erlangen (Dissertation).

Feist, S. (1939) *Vergleichendes Wörterbuch der gotischen*

- Sprache mit Einschluss des Krimgotischen und sonstiger zerstreuter Überreste des Gotischen*. Dritte neubearbeitete und vermehrte Auflage. Leiden.
- Gipfert, J. (1993) *Iranica Armeno-Iberica. Studien zu den Iranischen Lehnwörtern im Armenischen und Georgischen*. Wien.
- Hübschmann, H. (1897) *Armenische Grammatik, Erster Teil, Armenische Etymologie*. Leipzig (3. imp., Hildesheim – New York, 1972).
- Isebaert, L. (1980) *De indo-iraanse bestanddelen in de tocharische woordenschat*. Leuven.
- Ĵahukyan, G. B. (1987) *Hayoc' lezvi patmowt'yown*. Erevan.
- Jungmann, P. & J. J. S. Weitenberg (1993) *A Reverse Analytical Dictionary of Classical Armenian*. Berlin – New York.
- Kellens, J. (1974) *Les noms-racines de l'Avesta*. Wiesbaden.
- Klingenschmitt, G. (1982) *Das altarmenische Verbum*. Wiesbaden.
- Kloekhorst, A. (2008) *Etymological Dictionary of the Hittite Inherited Lexicon*. Leiden – Boston.
- Lipp, R. (2009) *Die indogermanischen und einzelsprachlichen Palatale im Indo-Iranischen*, I-II. Heidelberg.
- MacKenzie, D. N. (1971) *A Concise Pahlavi Dictionary*. London.
- Mallory, J. P. & D. Q. Adams (eds.) (1997) *Encyclopedia of Indo-European Culture*. London – Chicago.
- Manaster R., A. ms. Armenian -z- < *-b^hy-, -c^c < *-zk^c.
- Martirosyan, H. K. (2010) *Etymological Dictionary of the Armenian Inherited Lexicon*. Leiden – Boston.
- Meillet, A. (1894) De quelques difficultés de la théorie des gutturales indo-européennes. *Mémoires de la Société de Linguistique de Paris* 8, 277-304.
- Meillet, A. (1922) De quelques mots parthes en arménien. *Revue des Études Arméniennes* II, 1-6.
- Melchert, H.C. Forthcoming. Semantics and Etymology of Hittite *takš-*. Forthcoming in Festschrift for Alexander Lubotsky.
- Olsen, B. A. (1999) *The Noun in Biblical Armenian, Origin and Word-Formation – with special emphasis on the Indo-European heritage*. Trends in Linguistics, Studies and Monographs 119. Berlin – New York.
- Olsen, B. A. (2002) A Note on Armenian Preverbs and Prepositions. In F. Cavoto (ed.), *The linguist's linguist: a collection of papers in honour of Alexis Manaster Ramer*. München, 309-316.
- Olsen, B. A. (2005) On Iranian dialectal diversity in Armenian. In G. Meiser & O. Hackstein (eds.), *Sprachkontakt und Sprachwandel: Akten der XI. Fachtagung der Indogermanischen Gesellschaft, 17.-23. September 2000, Halle an der Saale*, 473-481. Wiesbaden.
- Olsen, B. A. Forthcoming. The Indo-European vocabulary of sheep, wool and textile production. To appear in: R. Iversen & G. Kroonen (eds.), *Archaeology and Language – and the future of archaeo-linguistic studies*. Oxford.
- Patrubány, L. v. (1902) Zur armenischen Wortforschung. *Indogermanische Forschungen* 14, 54-59.
- Pedersen, H. (1905) Zur armenischen Sprachgeschichte. *Zeitschrift für vergleichende Sprachwissenschaft* 38, 194-240.
- Périkhanian, A. (1968) Notes sur le lexique iranien en arménien. *Revue des Études Arméniennes* 5, 9-30.
- Pinhasi, R. et al. (2010) First Direct Evidence of Chalcolithic Footwear from the Near Eastern Highlands. *PLoS ONE*, 9 June 2010.
- Praust, K. (2000) Altindisch *dr̥-/d̥r̥-*: *seṭ* oder *aniṭ*? In B. Forssman & R. Plath (eds.), *Indoarisch, Iranisch und die Indogermanistik. Arbeitstagung der Indogermanischen Gesellschaft vom 2. bis 5. Oktober 1997 in Erlangen*, 445-441. Wiesbaden.
- Rasmussen, J. E. (1999) Miscellaneous problems in IE languages VII. 52. Germanic instrument nouns in *-la-. *Selected Papers on Indo-European Linguistics. With a Section on Eskimo Linguistics*, 1-2, 651-653. Copenhagen.
- Saradževa, L. A. (1986) *Armjano-slavjanskije leksiko-semantičeskie paraleli: sravitel'no-istoričeskoe issledovanie genetičeski obščej leksiki*. Yerevan.
- Schmitt, R. (1967) *Dichtung und Dichtersprache in indogermanischer Zeit*. Wiesbaden.
- Schmitt, R. (1983) Iranisches Lehnwort im Armenischen. *Revue des Études Arméniennes* 17, 73-112.
- Solta, G. R. (1960) *Die Stellung des Armenischen im Kreise der indogermanischen Sprachen*. Wien.
- Solta, G. R. (1990) Die Stellung des Armenischen im Kreise der indogermanischen Sprachen. Ein Überblick. In E. M. Ruprechtsberger (ed.), *Armenien, Beiträge zur Sprache, Geschichte und Archäologie*, Linz, 7-17.
- Spiegelberg, W. (1907) Ägyptische Lehnwörter in der älteren griechischen Sprache. *Zeitschrift für vergleichende Sprachforschung* 41, 127-132.
- Wackernagel, J. (1954) *Altindische Grammatik*. Band II, 2 "Die Nominalsuffixe" von Albert Debrunner. Göttingen.
- Winter, W. (1962) Problems of Armenian phonology II. *Language* 38, 254-262.
- Winter, W. (1983) Nochmals arm. *hiwsn* 'Zimmermann'. *Die Sprache* 29, 177-181.